

In the Claims:

Please amend the claims as follows:

1. (cancelled)

2. (cancelled)

3. (currently amended) The device according to claim 2; 21, wherein said connecting members comprise a plurality of teeth projecting from each stop element ~~tooth-like projections on the essentially tangentially directed surfaces of the stop elements, when a row has been formed,~~ and recesses ~~corresponding thereto on corresponding surfaces of adjacent stop elements~~ between the teeth.

4. (currently amended) The device according to claim 2; 21, wherein the connecting members comprise, ~~at the essentially tangentially directed ends of the stop elements, when a row has been formed,~~ essentially axially extending grooves or recesses and projections fitting therein and adapted to be inserted into ~~these~~ the grooves or recesses.

5. (currently amended) The device according to claim 4; 21, wherein said fixing ~~means~~ elements comprise first holes distributed around ~~the~~ an axis of rotation of the ~~arm in said first robot part~~ and second holes arranged in the stop elements, ~~as well as~~ and elongated rod-shaped pieces which are each adapted to be inserted through ~~a first~~ the first holes and the second holes

and a second hole for fixing the ~~respective stop element elements~~ to the first robot part.

6. (currently amended) The device according to claim 5, wherein said rod-shaped pieces are bolts ~~designed~~ for screwing the stop elements to said first robot part.

7. (currently amended) The device according to claim 4; 21, wherein said ~~set of~~ stop elements have ~~comprises stop elements of mutually considerably~~ different lengths with respect to the angle through which they ~~are intended to~~ extend along said circular arc.

8. (currently amended) The device according to claim 7, wherein said ~~set includes~~ stop elements include 1-3 first stop elements ~~with a considerably having a~~ larger said angle through which they extend along said circular arc than ~~the~~ other stop elements which are larger in number than the first ~~ones~~ stop elements.

9. (currently amended) The device according to claim 8, wherein said ~~set includes~~ stop elements include at least one first stop element ~~(7)~~ with ~~a said~~ an angle through which they extend along said circular arc exceeding 60°.

10. (currently amended) The device according to claim 8, wherein said ~~set includes~~ stop elements include several, other stop elements with ~~a said~~ an angle through which they extend along said circular arc between 10° and 40°.

11. (currently amended) The device according to claim 4; 21, wherein the stop elements

~~are formed from blocks having~~ have essentially the shape of truncated sectors of a circle.

12. (currently amended) The device according to claim 1, ~~21~~, wherein ~~said means are adapted to fix the stop elements to~~ the first robot part is an arm of an ~~the~~ industrial robot.

13. (currently amended) The device according to claim 1, ~~21~~, wherein ~~it is designed for application to a rotary joint between~~ the first and second robot parts ~~in the form of two~~ are arms of an industrial robot.

14. (currently amended) The device according to claim 1, ~~21~~, wherein ~~it is designed for application to a rotary joint in the form of~~ the first robot part and the second robot part are a stand and a robot foot of ~~an~~ the industrial robot.

15. (cancelled)

16. (cancelled)

17. (currently amended) The device according to claim 8, wherein ~~said set includes~~ stop elements include at least one first stop element with ~~a said~~ the angle through which they extend along said circular arc between 65° and 90°.

18. (currently amended) The device according to claim 8, wherein ~~said set includes~~ stop elements include several other stop elements with ~~a said~~ the angle through which they extend

along said circular arc between 15° and 30°.

19. (currently amended) The device according to claim 8, wherein said ~~set includes~~ stop elements include 3-6 other stop elements with ~~a said~~ the angle through which they extend along said circular arc between 10° and 40°.

20. (currently amended) The device according to claim 8, wherein said ~~set includes~~ stop elements include 3-6 other stop elements with ~~a said~~ the angle through which they extend along said circular arc between 15° and 30°.

21. (new) A device for restricting a working range around an axis of an industrial robot, the device comprising:

a first fixed stop arranged on a first robot part and comprising a first stop surface;

a second fixed stop arranged on a second robot part and comprising a second stop surface, the first robot part and the second robot part extending from and rotating about a common axis of rotation;

a plurality of stop elements arranged adjacent to each other on the first robot part, each stop element comprising mutually engaging connecting members configured to mechanically interlock adjacent stop elements and transmit forces between adjacent stop elements when the stop elements engage the first fixed stop or the second fixed stop such that the individual stop elements essentially behave as a single coherent stop element; and

fixing elements configured to fix the stop elements to the first robot part in a row one after another and making contact with one another along a circular arc around an axis of rotation

of the first robot part, wherein the first fixed stop and the second fixed stop are arranged on the arc at opposite sides of the row of stop elements, thus forming opposite end positions for rotation of the first robot part relative to the second robot part, and wherein the stop elements hit against the stop surfaces of the first fixed stop and the second fixed stop when rotating the first part relative to the second part, thereby restricting a maximum angle of rotation of the first robot part relative to the second robot part.

22. (new) A method for restricting a working range of an industrial robot around an axis, the method comprising:

providing a first fixed stop arranged on a first robot part and comprising a first stop surface;

providing a second fixed stop arranged on a second robot part and comprising a second stop surface;

connecting the first robot part to the second robot part such that the first robot part and the second robot part extend from a common axis of rotation;

arranging a plurality of stop elements adjacent to each other on the first robot part;

mutually engaging mechanically interlocking connecting members on adjacent stop elements;

fixing the stop elements to the first robot part with fixing elements, wherein the stop elements are fixed to the first robot part in a row one after another and making contact with one another along a circular arc around an axis of rotation of the first robot part, wherein the first fixed stop and the second fixed stop are arranged on the arc at opposite sides of the row of stop elements, thus forming opposite end positions for rotation of the first robot part relative to the

second robot part;

rotating at least one of the first robot part and the second robot part about the common axis of rotation such that one of the stop elements hits against one of the stop surfaces of the first fixed stop or the second fixed stop such that forces are transmitted between adjacent stop elements such that the individual stop elements essentially behave as a single coherent stop element, thereby restricting a maximum angle of rotation of the first robot part relative to the second robot part.